



# PRO-VE 2022

23rd IFIP/SOCOLNET Working Conference on Virtual Enterprises

## Collaborative Networks in Digitalization and Society 5.0

### Special Session on Reshaping Supply Chains for Societal challenges

#### Scope.

Supply Chains (SC) are part of a global and complex environment challenged by several trends, in particular the social ones, as aging population, the lack of specialized workers and specific skills concerning digital technologies, the growth of urban areas and the raise of smart cities, and increasing personalization requirements by customers. This will deeply affect operations management, both in production and logistics requiring a concurrent integration of SCs and forcing SC to enlarge and enhance collaboration with all its potential stakeholders according to the ongoing evolution towards a new human-centered society. Research on these topics has been partly applied at the factory level but a similar approach specifically addressing SC and its peculiar needs is still in its infancy. The evolution of SC towards Industry5.0 and Society5.0 paradigms requires enhancing the active role of different SC stakeholders such as workers, consumers and citizens and leveraging on digital technologies for the benefit and convenience of the entire society. The aim of this special session is to collect scientific contributions on the collaborative models for addressing societal challenges in SCs.

Topics of interest include but are not limited to:

- *Innovative collaborative models* based on Big Data Analytics and Artificial Intelligence enabling to interact with customers and with the market to improve capability of SCs to predict demand, to collect data from the field (directly from the product) to configure personalised solutions enriching customer experience.
- *Collaborative digital platforms and related decision-making tools* to increase real time coordination and synchronization among all the actors of the chain.
- *Innovative solutions based on track and trace systems* of SC processes, blockchain, sensor-based systems (e.g. IoT) for monitoring social sustainability and ensuring consumer trust.
- *New methods and tools to integrate SC activities* (manufacturing and distribution) in smart cities infrastructures based on AI to collaboratively optimize the flows of citizens and goods, personalized shipping and to efficiently implement last mile delivery.
- *New models and tools for safety and ergonomics* in SC operations to relieve workers from risky and heavy tasks. Design of VR/AR specific skill programmes with support of AI to train SC workforce.
- *Digital technologies in supporting social oriented SCs* and the role of industrial policies.

#### Session Organizers:

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#### Submission procedure:

Short abstracts submission (100-150 words): March, 19th, 2022

Full papers submission: April, 16th, 2022

Acceptance Notice: May, 28th, 2022

Final version Submission: Jun 11 th, 2022

Acceptance of papers is based on the full paper (Technological development and case application papers up to 8 pages and Foundational Research papers up to 12 pages).

Each paper will be evaluated by three members of the International Program Committee. When submitting on the web site, you have to indicate the name of the special session. Submission procedure via EasyChair available on: <http://www.pro-ve.org>, with copy by email to the chairs of the special session.

Note: a selection of the papers presented in this special session will be considered for the **Special Issue** "Innovative approaches in reshaping the Supply Chain for societal challenges" to be appeared in the **Journal Production Planning and Control**.

[https://think.taylorandfrancis.com/special\\_issues/reshaping-supply-chain-societal-challenges/?utm\\_source=TFO&utm\\_medium=cms&utm\\_campaign=JPG15743](https://think.taylorandfrancis.com/special_issues/reshaping-supply-chain-societal-challenges/?utm_source=TFO&utm_medium=cms&utm_campaign=JPG15743)